Patent claims

1.   A device (600) for producing a processing tool (560)
      which processes at least one electronic workflow comprising working steps
      on a first data processing system,
      the device (600) comprising
      − an information model (530) with data object types and relations between
        these data object types,
      − a specifying facility (580) for producing an electronic specification (550)
        of the workflow by using the information model (530),
      − a configuring facility (500) for configuring a prescribed standard
        processing tool by means of the specification (550), the prescribed
        standard processing tool including a prescribed data storage system (570),
      characterized in that
      the device (600) comprises
      − a facility (520) for producing the information model (530)
      − and an adapting facility (610) for adapting the prescribed data storage
        system (570) to the information model (530),
      the information model producing facility (520) comprises
      − means for adding, deleting or changing data object types of a prescribed
        information model
      − and means for adding, deleting or changing relations between these data
        object types,
      and the configuring facility (500) comprises
      − means for selecting, adding, deleting, changing or linking working steps,
      − means for selecting a data object type of the information model (530) and
        producing a data object of a selected data object type
      − and means for linking data objects with working steps.

2.   The device as claimed in claim 1, characterized in that
      the device (600) comprises a library (540) with electronic standard
      workflows,
          each electronic standard workflow being assigned a standard processing
          tool,
      the specifying facility (580) comprises
      − means for selecting a standard workflow from the library (540) and

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– means for working on the selected standard workflow,

and the configuring facility (500) comprises means for configuring that standard processing tool which is assigned to the selected standard workflow.

3. The device as claimed in claim 2, characterized in that the library (540) comprises at least one of the following electronic standard workflows for the supply management of a company which manufactures technical products:

– determination of strategies or prescribed specifications for order-placement decisions for a prescribed extent of procurement to at least one supplier,

– order placement of a predetermined extent of procurement to at least one supplier,

– handling of changes to at least one prescribed extent of procurement,

– recording and/or assessment of at least one supplier,

– monitoring of the procurement operation for a prescribed extent of procurement and

– cost reduction for a prescribed extent of procurement,

– forming of the cost target for at least one prescribed extent of procurement,

– forming of the cost target for at least one cost type which is associated with at least one prescribed extent of procurement.

4. The device as claimed in claim 1, characterized in that the information model (530) comprises

– a data object type (100.10) for component types,

– a data object type (100.3, 100.11, 100.12) for suppliers

– and a data object type (100.1) for extents of procurement

and the data object type (100.1) for extents of procurement is connected by a respective relation to the data object type (100.10) for component types and the data object type (100.3, 100.11, 100.12) for suppliers.

5. The device as claimed in claim 4, characterized in that the device (600) comprises a facility for producing a data object generator and for integrating the generator in the processing tool (560)

and the data object generator is able to generate a first data object of the data object type for extents of procurement and further data objects of the data

object type for suppliers and such from the data object type for component types,

the first data object being connectable to the further data objects by relations during the entire processing of the electronic workflow.

6.   The device as claimed in claim 4 or claim 5, characterized in that the information model comprises a data object type (100.2) for partial extents of procurement,

which is connected by a relation to the data object type (100.3, 100.11, 100.12) for suppliers,

and each data object of the data object type (100.2) for partial extents of procurement is connectable to at most one data object of the data object type (100.3, 100.11, 100.12) for suppliers during the processing.

7.   The device as claimed in one of claims 1 to 6, characterized in that the device (600) comprises
      – a library of standard business rules which relate to data object types and/or working steps,
      – and a facility for selecting standard business rules.

8.   The device as claimed in one of claims 1 to 7, characterized in that
      the facility (520) for producing the information model (530) comprises
      means (610) for producing a data model (531) compatible with the information model by using the Unified Modeling Language.

9.   A method for producing a processing tool (560),
      the processing tool (560) processing at least one electronic workflow comprising working steps on a first data processing system,
      and a second data processing system being used for producing the processing tool (560),
      the steps comprising
      a)   producing an information model (530) for the workflow,
            a prescribed information model being adapted and data object types and/or relations between these data object types being added, deleted and/or changed during the adaptation,

b) producing a specification (550) of the workflow by using data object types and relations of the adapted information model (530),

c) adapting a standard processing tool which comprises a prescribed data storage system (570) to the adapted information model (530),

d) adapting the prescribed data storage system (570) to the adapted information model (530), and

e) configuring the adapted standard processing tool by means of the specification (550).

10. The method as claimed in claim 9, characterized in that
   – at least one electronic workflow is selected from a library (540) of electronic standard workflows with working steps, each electronic standard workflow being assigned a standard processing tool,
   – the adapted standard processing tool is that one which is assigned to the selected standard workflow,
   – and, in the production of the specification (550), the selected standard workflow is adapted to the workflow to be processed and working steps of the standard workflow are thereby added, deleted or changed.

11. The method as claimed in claim 9 or claim 10, characterized in that
   a source program for the processing tool (560) is produced,
   which program is able to run after translation into a machine language or by means of an interpreter on the first data processing system.

12. The method as claimed in one of claims 9 to 11, characterized in that,
   by analysis of the processing tool (560) produced, it is determined
   which working steps of the electronic workflow have which influence on the processing time of the processing tool (560).

13. The method as claimed in one of claims 9 to 12, characterized in that
   – a further processing tool is produced for processing a further electronic workflow,
   – the average numbers
      – of generated screen forms,
      – of required screen interactions,
      – of databank reading accesses

        – and/or of databank writing accesses

of the processing tool (560) and those of the further processing tool are determined

        – and a comparison of the workflow and the further workflow which covers the average numbers is produced.

14.   A computer program which can be loaded directly into the internal memory of a computer and comprises software sections with which a method as claimed in one of claims 9 to 13 can be executed when the product runs on a computer.

15.   A computer program product which is stored on a medium which can be read by a computer and which has program means which can be read by a computer and cause the computer to execute a method as claimed in one of claims 9 to 13.